

NEW GRASSES FROM GUATEMALA

Jason R. Swallen

TRISETUM ALTUM Swallen, sp. nov.

Culmi erecti, 135 cm. alti, glabri; vaginae retrorse scabrae; ligula hyalina, 5-8 mm. longa; laminae usque ad 30 cm. longae, firmae, infra scabrae, supra sparse pilosae; panícula 22 cm. longa, 4 cm. lata, ramis fasciculatis adscendentibus, inferioribus usque ad 10 cm. longis; glumae subaequales, acutae vel acuminatae 7-8 mm. longae; lemma infimum 8 mm. longum, scabrum, minute dentatum, arista geniculata, contorta, 6 mm. longa, supra basin 1/2 inserta.

Perennial; culms erect, 135 cm. high, glabrous; sheaths much shorter than the internodes, rather prominently retrorsely scabrous; ligule hyaline, 5-8 mm. long; blades as much as 30 cm. long, 3-4 mm. wide, firm, strongly nerved, very scabrous on the under surface, sparsely pilose with long hairs on the upper; inflorescence 22 cm. long, about 4 cm. wide, the branches in somewhat distant fascicles, ascending, the lower ones as much as 10 cm. long with shorter ones intermixed; glumes narrow, acute or acuminate, scabrous on the keel, the first 7 mm. long, 1-nerved, the second 8 mm. long, 3-nerved; lower lemma 8 mm. long, scabrous, minutely toothed, awned from just above the middle of the back, the awn about 6 mm. long, twisted and contorted in the lower part.

Type in the U. S. National Herbarium, No. 1,935,005, collected in pine woods east of Finca Piemonte, El Progreso, Guatemala, Feb. 11, 1952, by Julian A. Steyermark (No. 43,836).

TRISETUM ANGUSTUM Swallen, sp. nov.

Culmi erecti vel adscendentes, 12-24 cm. alti; vaginae glabrae vel inferiores pubescentes; laminae 3-8 cm. longae, 1 mm. latae, glabrae vel sparse pilosae, inferiores dense pilosae; paniculae 4-8 cm. longae, angustae, ramis distantibus appressis; spiculae 2-florae; glumae acutae vel acuminatae, 1-nerves, prima 3.5-4 mm. longa, secunda latior 4-5 mm. longa; lemma inferius 4.5 mm. longum, scaberulum, minute dentatum, mucronatum.

Perennial; culms slender, densely tufted, erect or ascending, 12-24 cm. high; sheaths glabrous or the lower ones pubescent; blades 3-8 cm. long, 1 mm. wide, those of the innovations densely pilose, those of the culm glabrous or sparsely pilose; panicles 4-8 cm. long, very narrow, the few rather distant branches closely appressed; spikelets 2-flowered; glumes acute or acuminate, 1-nerved, the first narrow, 3.5-4 mm. long, the second broader, 4-5 mm. long; lower lemma 4.5 mm. long, scaberulous, the tip minutely and irregularly toothed, the midnerve excurrent in a very short mucro.

Type in the herbarium of the Chicago Natural History

Museum, No. 1,046,546, collected on top of dry ridge in pine forest, between San Sebastian and summit of Volcán Tajumulco, San Marcos, Guatemala, Feb. 13, 1940, by Julian A. Steyermark (No. 35,525).

TRISETUM PINETORUM Swallen, sp. nov.

Culmi graciles, erecti vel adscendentes, 35-70 cm. alti, glabri; vaginae glabrae, suprema elongata; ligula hyalina, 2-3 mm. longa; laminae lineares, elongatae, 1-2 mm. latae, scaberulae; paniculae 8-15 cm. longae, angustae, plus minusve densae, interruptae, ramis inferioribus ca. 3 cm. longis; spiculae 3-florae; glumae subaequales, acutae; lemma inferius 6 mm. longum summo scabrum, dentatum, arista geniculata contorta 10-12 mm. longa supra basin 1/2 inserta.

Perennial; culms slender, tufted, erect or ascending, 35-70 cm. high, glabrous; sheaths mostly shorter than the internodes, the uppermost elongate, glabrous; ligule hyaline, 2-3 mm. long; blades linear, elongate, 1-2 mm. wide, scaberulous; panicles 8-15 cm. long, narrow, rather dense, somewhat interrupted, the lower branches about 3 cm. long, appressed; spikelets 2-flowered; glumes subequal, acute, the first 1-nerved, the second 3-nerved; lower lemma 6 mm. long, smooth below, scabrous above, the tip lacerate-toothed, the awn inserted about the middle of the back, 10-12 mm. long, geniculate, twisted below the bend.

Type in the herbarium of the Chicago Natural History Museum, No. 1,048,257, collected on pine-abies-clad slope, Volcán Santo Tomás, Quezaltenango, Guatemala, Jan. 22, 1940, by Julian A. Steyermark (No. 34,824).

This species resembles *Trisetum evolutum*, but differs in having glabrous culms and sheaths and the second glume 3-nerved.

CALAMAGROSTIS VULCANICA Swallen, sp. nov.

Culmi caespitosi, erecti, 40-80 cm. alti; vaginae glabrae; ligula brevissima; laminae convolutae, firmae, infra glabrae vel scaberulae supra dense pilosae; paniculae 8-14 cm. longae ramis gracilibus divergentibus, inferioribus usque ad 7 cm. longis in parte inferiore nudis; glumae aequales, 6-7 mm. longae, acuminatae; lemma 5 mm. longum, scabrum, nervis excurrentibus, arista 10 mm. longa, geniculata, pilosa, supra basin 1/2 inserta; calli pili 2 mm. longi; rachilla 2 mm. longa dense villosa pilis 2 mm. longis.

Perennial; culms densely tufted, erect, 40-80 cm. high; sheaths smooth or nearly so, usually longer than the internodes, the lower ones crowded; ligule very short, not visible from the side on the lower leaves; blades convolute, firm, up to 40 cm. long, more or less curved, smooth or scaberulous on the under surface, strongly nerved and rather densely pilose above, especially toward the base; panicles pyramidal, 8-14 cm. long, the slender, spreading to recurved branches in rather distant

fascicles, the lower ones as much as 7 cm. long, naked below the middle; spikelets 6-7 mm. long, the glumes equal, acuminate, 3-5-nerved; lemma 5 mm. long, scabrous, the tip hyaline, the nerves excurrent, awned from about the middle of the back, the awn about 10 mm. long, geniculate, tightly twisted below the bend, appressed pilose; callus hairs dense, about 2 mm. long; rachilla 2 mm. long, densely hairy, the hairs about 2 mm. long.

Specimens of this species were formerly referred to *C. junciformis*, but are readily distinguished by the short ligule, pilose blades, and pilose awn.

Type in the U. S. National Herbarium, No. 1,637,886, collected on Volcán Santa Maria, Quezaltenango, Guatemala, by Alexander F. Skutch (No. 836).

DIGITARIA OBTUSA Swallen, sp. nov.

Culmi erecti vel geniculati, ca. 50 cm. alti; vaginae internodia aequantes, glabrae vel inferiores marginibus sparse pilosae; laminae 9-13 cm. longae, 3-4 mm. latae, acuminatae, glabrae vel sparse pilosae; racemi 5, 8-10 cm. longi; spiculae densae, 2.2 mm. longae, sparse vel dense pilosae; gluma prima nulla; gluma secunda fructo 1/3-1/2 brevior, 3-nervis; lemma sterile fructum aequans, 5-nerve; fructus acutus, striatus, brunneus.

Perennial; culms erect, geniculate at the lower nodes, about 50 cm. high; sheaths about as long as the internodes, glabrous, or the lower ones sparsely pilose on the margins; blades 9-13 cm. long, 3-4 mm. wide, flat, acuminate, glabrous, or sparsely pilose toward the base; racemes 5, 8-10 cm. long, stiffly ascending, spikelet-bearing to the base, pilose in the axils; spikelets mostly in 3's, crowded, 2.2 mm. long; first glume wanting; second glume and sterile lemma sparsely to rather densely pilose between the nerves with capitate hairs, the glume obtuse, 3-nerved, 1/2-2/3 as long as the fruit, the lemma 5-nerved, equalling the fruit; fruit acute, dark brown, striate.

Type in the U. S. National Herbarium, No. 795,987, collected at Coban, Alta Verapaz, Guatemala, August 1912, by H. von Turckheim (No. 3,793).

This species has been referred to *Digitaria villosa* (Walt.) Muhl. which differs in having the racemes naked or nearly so at the base, less crowded spikelets, and longer, acute second glume. Several specimens from southern Mexico also may be referable to this species.

ICHNANTHUS BREVIVAGINATUS Swallen, sp. nov.

Culmi decumbentes ramis adscendentibus 20-30 cm. longis; vaginae internodiis multo breviores, dense pilosae; laminae lanceolatae, acuminatae, usque ad 9 cm. longae, 15 mm. latae, infra scabrae, supra glabrae; paniculae terminales et axillares, 4-7 cm. longae, ramis appressis vel adscendentibus; spiculae 4 mm. longae; gluma prima acuta, spicula 1/2 brevior, vel

acuminata spiculam aequans; gluma secunda acuminata, lemmati sterili paulo longior; fructus 2.5 mm. longus, acutus, basi appendicibus nullis.

Annual; culms widely decumbent-spreading, the ascending flowering branches 20-30 cm. long; sheaths mostly 15-20 mm. long, much shorter than the internodes, usually rather densely pilose; blades lanceolate, as much as 9 cm. long, 15 mm. wide, acuminate, scabrous below, smooth above, the cells readily visible with a lens on the under surface; panicles terminal and sometimes axillary from the upper sheath, 4-7 cm. long, the branches appressed or ascending, the branchlets and spikelets appressed; spikelets 4 mm. long; first glume acute, about half as long as the spikelet to acuminate or attenuate and nearly as long as the spikelet, scabrous on the keel; second glume acuminate, usually longer than the acute sterile lemma; fruit 2.5 mm. long, acute, the wings reduced to scars.

Type in the U. S. National Herbarium, No. 1,867,601, collected on high ridge, Swasey Branch, Monkey River, Toledo District, British Honduras, March 14, 1942, by Percy H. Gentle (No. 3,971).

The only other species of *Ichnanthus* having the cells plainly visible on the under surface of the blades is *I. axillaris* which has shorter and broader ovate blades.

ICHNANTHUS GRACILIS Swallen, sp. nov.

Culmi graciles, decumbentes, elongati, ramis adscendentibus ca. 15 cm. longis; vaginae glabrae vel sparse pilosae, marginibus ciliatae; laminae 3-5.5 cm. longae, 4-7 mm. latae, lanceolatae, supra sparse papilloso-hispidae; paniculae ca. 3 cm. longae, angustae, pauciflorae; spiculae 3 mm. longae; gluma prima abrupte acuminata glumam secundam aequans vel paulo brevior; gluma secunda et lemma sterile subaequalia, gluma acuta, lemma subobtusum; fructus 2 mm. longus, lucidus, basi appendicibus nullis.

Annual?; culms slender, creeping, branching, elongate, glabrous, the flowering branches ascending, mostly about 15 cm. long; sheaths glabrous or sparsely pilose, the margins ciliate; blades 3-5.5 cm. long, 4-7 mm. wide, lanceolate, acute, scabrous on the margins, sometimes sparsely papillose-hispid on the upper surface toward the base; panicles about 3 cm. long, narrow, few-flowered, short-exserted or partly enclosed in the sheath; spikelets 3 mm. long; first glume abruptly acuminate, equaling the second glume or a little shorter, scabrous on mid-nerve; second glume and sterile lemma subequal, the glume acute, the lemma sub-obtuse; fruit 2 mm. long, smooth and shining, the wings reduced to scars.

Type in the herbarium of the Chicago Natural History Museum, No. 1,045,455, collected on top of ridge of Loma de la Poloma, above Finca El Porvenir, San Marcos, Guatemala, March 8, 1940, by Julian A. Steyermark (No. 37,293).

LASIACIS LINEARIS Swallen, sp. nov.

Culmi vagantes, ramis adscendentibus ca. 75 cm. longis; vaginae dense villosae internodiis longiores; ligula 2-4 mm. longa; laminae lineares, acuminatae, 16-22 cm. longae, 5-9 mm. latae, scabrae vel sparse pilosae; panícula 30 cm. longa, ramis gracilibus, solitariis, scabris, anguste adscendentibus, paucifloris; spiculae 4 mm. longae, pedicellis longis, erectis.

Culms relatively slender, straggling, the flowering branches about 75 cm. long; sheaths densely villous, as long as or longer than the internodes; ligule 2-4 mm. long, brown; blades linear, acuminate, narrowed toward the base, 16-22 cm. long, 5-9 mm. wide, scabrous, sometimes sparsely pilose; panicle about 30 cm. long, the slender scabrous branches rather narrowly ascending, solitary, distant, bearing a few long-pedicellate spikelets; spikelets 4 mm. long, usually erect.

Type in the herbarium of the Chicago Natural History Museum, No. 1,044,422, collected in pine-covered canyon bordering Río Lima, Sierra de las Minas, below Finca Alejandria, Zacapa, Guatemala, Oct. 14, 1939, by Julian A. Steyermark (No. 30,046).

ADDITIONAL NOTES ON THE GENUS AEGIPHILA. XIII

Harold N. Moldenke

AEGIPHILA Jacq.

To the List of Excluded Species should be added Aegiphila triflora Moldenke, Suppl. List Invalid Names 1, in syn. = Clerodendrum tessmanni Moldenke.

An additional synonym of Aegiphila virgata Turcz. is Cornutia brasiliensis Miers ex Turcz., Bull. Soc. Nat. Mosc. 36 (2): 220, in syn. 1863; Moldenke, Prelim. Alph. List Invalid Names 23, in syn. 1940. Since Aegiphila virgata Turcz. is based on a Miers specimen from Rio de Janeiro and Cornutia brasiliensis Miers is synonymous with it, and since Cornutia brasiliensis Mart. is a synonym of Arrabidaea corchorioides (Cham.) P. DC. [see Fedde, Repert. 40: 196. 1936] in the Bignoniaceae, it seems very probable that Aegiphila virgata, long a perplexing name [see Brittonia 1: 469-470. 1934] is also synonymous with Arrabidaea corchorioides. The original description of Aegiphila virgata agrees very well with the characters of Arrabidaea corchorioides.

Line 97a on page 271 of my key to the species and varieties of Aegiphila in Brittonia 1 (1934) should read: 97a. Branchlets tomentulose-puberulent, puberulent, furfuraceous, or pulverulent. Line 114 on page 273 should lead to: 79. A. laxicipulis.

So many persons have asked me to explain the sense in which I use various descriptive terms for leaves and flowers in my publi-